#9

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RAW SEQUENCE LISTING DATE: 03/18/2002
PATENT APPLICATION: US/09/897,776A TIME: 15:38:33

Input Set : A:\08411-027001.txt
Output Set: N:\CRF3\03182002\I897776A.raw

```
 4 <110> APPLICANT: Schnable, Patrick S.
 5       Liu, Feng
 6       Fu, Yan
 8 <120> TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING MULTIPLE
 9       START CODONS AND HISTIDINE TAGS
11 <130> FILE REFERENCE: 08411-027001
13 <140> CURRENT APPLICATION NUMBER: US 09/897,776A
14 <141> CURRENT FILING DATE: 2001-06-29
16 <150> PRIOR APPLICATION NUMBER: US 09/732,990
17 <151> PRIOR FILING DATE: 2000-12-08
19 <150> PRIOR APPLICATION NUMBER: US 60/169,725
20 <151> PRIOR FILING DATE: 1999-12-08
22 <160> NUMBER OF SEQ ID NOS: 37
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 93
28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence
31 <220> FEATURE:
32 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
34 <221> NAME/KEY: CDS
35 <222> LOCATION: (1)...(84)
37 <221> NAME/KEY: CDS
38 <222> LOCATION: (88)...(93)
40 <400> SEQUENCE: 1
41 aag ctt cac cac cat cat cat cac gca tca cca cca cca cca cgc atc       48
42 Lys Leu His His His His His His Ala Ser Pro Pro Pro Pro Arg Ile
43  1               5                  10                  15
45 atc atc acc atc acc tcg agc gtc aca cta gct gag taa gca tgc          93
46 Ile Ile Thr Ile Thr Ser Ser Val Thr Leu Ala Glu    Ala Cys
47              20                  25                  30
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 66
51 <212> TYPE: DNA
52 <213> ORGANISM: Artificial Sequence
54 <220> FEATURE:
55 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
57 <400> SEQUENCE: 2
58 gtacccacca ccatcatcat cacgcatcac caccaccacc acgcatcatc atcaccatca      60
59 cctcga                                                               66
61 <210> SEQ ID NO: 3
62 <211> LENGTH: 14
63 <212> TYPE: DNA
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64 <213> ORGANISM: Artificial Sequence
66 <220> FEATURE:
67 <223> OTHER INFORMATION: linker
69 <400> SEQUENCE: 3
70 ctgcagcggc cgcg 14
72 <210> SEQ ID NO: 4
73 <211> LENGTH: 22
74 <212> TYPE: DNA
75 <213> ORGANISM: Artificial Sequence
77 <220> FEATURE:
78 <223> OTHER INFORMATION: linker
80 <400> SEQUENCE: 4
81 ctaggcgccg gcgacgtctc ga 22
83 <210> SEQ ID NO: 5
84 <211> LENGTH: 16
85 <212> TYPE: DNA
86 <213> ORGANISM: Artificial Sequence
88 <220> FEATURE:
89 <223> OTHER INFORMATION: linker
91 <400> SEQUENCE: 5
92 ctagctgcag atatca 16
94 <210> SEQ ID NO: 6
95 <211> LENGTH: 16
96 <212> TYPE: DNA
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: linker
102 <400> SEQUENCE: 6
103 agcttgatat ctgcag 16
105 <210> SEQ ID NO: 7
106 <211> LENGTH: 25
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: primer for PCR
113 <400> SEQUENCE: 7
114 ccatcgatcc gagatagggt tgagt 25
116 <210> SEQ ID NO: 8
117 <211> LENGTH: 20
118 <212> TYPE: DNA
119 <213> ORGANISM: Artificial Sequence
121 <220> FEATURE:
122 <223> OTHER INFORMATION: primer for PCR
124 <400> SEQUENCE: 8
125 acgagctcag gcagagacga 20
127 <210> SEQ ID NO: 9
128 <211> LENGTH: 20
129 <212> TYPE: DNA
130 <213> ORGANISM: Artificial Sequence

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132 <220> FEATURE:
133 <223> OTHER INFORMATION: primer for PCR
135 <400> SEQUENCE: 9
136 acgagctcgc agagacgacg                                              20
138 <210> SEQ ID NO: 10
139 <211> LENGTH: 26
140 <212> TYPE: DNA
141 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: primer for PCR
146 <400> SEQUENCE: 10
147 cctcgagtca cacaggaaac agctaa                                        26
149 <210> SEQ ID NO: 11
150 <211> LENGTH: 24
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: primer for PCR
157 <400> SEQUENCE: 11
158 ggctagcagc tgtttcctgt gtga                                         24
160 <210> SEQ ID NO: 12
161 <211> LENGTH: 18
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: primer for PCR
168 <400> SEQUENCE: 12
169 gtggagcatc tggtcgca                                               18
171 <210> SEQ ID NO: 13
172 <211> LENGTH: 37
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: primer for PCR
179 <400> SEQUENCE: 13
180 gagatctgcc ataacatgtc atcatagctg tttcctg                            37
182 <210> SEQ ID NO: 14
183 <211> LENGTH: 35
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: linker
190 <400> SEQUENCE: 14
191 ctagccgaaa ttaatacgac tcactatagg gagac                              35
193 <210> SEQ ID NO: 15
194 <211> LENGTH: 66
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
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<223> OTHER INFORMATION: Synthetically generated oligonucleotide
<400> SEQUENCE: 15
tatacatatg gcatggcatg gccactgcag gatccaccac catcatcatc acgcatcacc 60
accacc 66
<210> SEQ ID NO: 16
<211> LENGTH: 67
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetically generated oligonucleotide
<400> SEQUENCE: 16
gacgtcgcat gcttactcag ctagtgtgat ggtgatgatg atggcctatg gtggtggtgg 60
tgatgcg 67
<210> SEQ ID NO: 17
<211> LENGTH: 97
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetically generated oligonucleotide
<400> SEQUENCE: 17
taatacgact cactataggg agaccacaac ggtttccctc tagaaataat tttgtttaac 60
tttaagaagg agatatacat atggcatggc atggcca 97
<210> SEQ ID NO: 18
<211> LENGTH: 13
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetically generated oligonucleotide
<400> SEQUENCE: 18
atggcatggc atg 13
<210> SEQ ID NO: 19
<211> LENGTH: 35
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: linker
<400> SEQUENCE: 19
aattgtctcc ctatagtgag tcgtattaat ttcgg 35
<210> SEQ ID NO: 20
<211> LENGTH: 28
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetically generated peptide
<400> SEQUENCE: 20
Lys Leu His His His His His His Ala Ser Pro Pro Pro Pro Arg Ile
1 5 10 15
Ile Ile Thr Ile Thr Ser Ser Val Thr Leu Ala Glu
20 25

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Input Set : A:\08411-027001.txt
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265 <210> SEQ ID NO: 21
266 <211> LENGTH: 93
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial Sequence
270 <220> FEATURE:
271 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
273 <221> NAME/KEY: CDS
274 <222> LOCATION: (2)...(76)
276 <221> NAME/KEY: CDS
277 <222> LOCATION: (80)...(91)
279 <400> SEQUENCE: 21
280 a agc ttc acc acc atc atc atc acg cat cac cac cac cac cac gca tca      49
281   Ser Phe Thr Thr Ile Ile Ile Thr His His His His His His Ala Ser
282    1               5                  10                  15
284 tca tca cca tca cct cga gcg tca cac tag ctg agt aag cat               91
285 Ser Ser Pro Ser Pro Arg Ala Ser His    Leu Ser Lys His
286             20                  25
288 gc                                                                   93
290 <210> SEQ ID NO: 22
291 <211> LENGTH: 25
292 <212> TYPE: PRT
293 <213> ORGANISM: Artificial Sequence
295 <220> FEATURE:
296 <223> OTHER INFORMATION: Synthetically generated peptide
298 <400> SEQUENCE: 22
299 Ser Phe Thr Thr Ile Ile Ile Thr His His His His His His Ala Ser
300   1               5                  10                  15
301 Ser Ser Pro Ser Pro Arg Ala Ser His
302             20                  25
304 <210> SEQ ID NO: 23
305 <211> LENGTH: 4
306 <212> TYPE: PRT
307 <213> ORGANISM: Artificial Sequence
309 <220> FEATURE:
310 <223> OTHER INFORMATION: Synthetically generated peptide
312 <400> SEQUENCE: 23
313 Leu Ser Lys His
314  1
316 <210> SEQ ID NO: 24
317 <211> LENGTH: 93
318 <212> TYPE: DNA
319 <213> ORGANISM: Artificial Sequence
321 <220> FEATURE:
322 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
324 <221> NAME/KEY: CDS
325 <222> LOCATION: (3)...(80)
327 <221> NAME/KEY: CDS
328 <222> LOCATION: (84)...(92)
330 <400> SEQUENCE: 24
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VERIFICATION SUMMARY DATE: 03/18/2002
PATENT APPLICATION: US/09/897,776A TIME: 15:38:34

Input Set : A:\08411-027001.txt
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